Ham-Digital Digest   Thu, 15 Sep 94   Volume 94 : Issue 307

Today's Topics:
                               AX.25
                 Canadian Callsign Database Available
                          forwarded message
                              gateway
                            Gateway....
                      HDLC protocol chips.
                      JNOS 1.10f lockups
          mfj 1270c/1274c modifications for the net software
                        mocom 35 on packet
                    VHF packet "talk" range
                    What NOS to use (2 msgs)
                        WNOS memory leak

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 14 Sep 1994 20:46:06
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!news.cs.utah.edu!cs.utexas.edu!
howland.reston.ans.net!torn!news.unb.ca!nbt.nbnet.nb.ca!dynam26.nbnet.nb.ca!
moores@network.ucsd.edu
Subject: AX.25
To: ham-digital@ucsd.edu

Can anyone point me to where I might find some of the original files surround
the introduction of ax.25? I have been on packet for a few years, but was not
around when most of the standards/software was written.

I would specifically like to see a good explanation of the ax.25 protocol, and
perhaps some good files on the nos implementation of that protocol.

                                                        Steve   VE1BCL

Date: Tue, 13 Sep 1994 16:07:29 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
cs.utexas.edu!utnut!torn!uunet.ca!uunet.ca!cfcsc!remote.cfcsc.dnd.ca!
goobie@network.ucsd.edu
Subject: Canadian Callsign Database Available
To: ham-digital@ucsd.edu

Thanks to Rob VE7FU and Phil VE3RD, the latest Canadian callsign database is
now available. The file is called HAMFLAT4.ZIP and can be accessed by
anonymous FTP to cfcsc.dnd.ca

It is located in the /hamradio/callbook section..

Please send me a note if you have any problems accessing this data.

73
Keith VE3OY @ VA3BBS

Date: Tue, 13 Sep 94 08:12:45 EDT
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
swiss.ans.net!solaris.cc.vt.edu!news.duke.edu!eff!news.kei.com!world!mv!lmr!
rapp@network.ucsd.edu
Subject: forwarded message
To: ham-digital@ucsd.edu

The following message is forwarded:

Date: Mon, 12 Sep 94 18:47:14 PDT
From: Eric Fort <1EJF8089@IBM.MTSAC.EDU>
Subject: gateway
To: rapp@lmr.MV.COM

I realize the difficulties involved in traversing between the internet and ampr
net. As a licienced ham operator is there any way you know to make this connec
tion? I am trying to work my uncle in north carolina on tcp/ip packet but I do
n't have a tnc yet. (starving student status)

any help would be appreciated. please feel free to repost this to rec.radio.ama
teur.digital.misc if you feel it appropriate.

                                    tnx n 73,
                                    de kd6glp (eric fort)
                                    1ejf8089@ibm.mtsac.edu

p.s.

Please tell me where to send postings to the above group. I would've mailed th
e group but couldn't get the mail reader to do it.
--

Please answer here or mail to Eric at the above address. Tnx, Larry W1HJF

L. M. Rappaport & Associates, Inc.   rapp@lmr.mv.com   voice +1 603 237 8400
Colebrook, NH 03576-0158   CIS 72427,2567   fax   +1 603 237 8430

Date: Sun, 11 Sep 94 01:11:17 Mst
From: agate!darkstar.UCSC.EDU!news.hal.COM!olivea!charnel.ecst.csuchico.edu!
psgrain!nntp.cs.ubc.ca!alberta!ve6mgs!ve6hf@ames.arpa
Subject: Gateway....
To: ham-digital@ucsd.edu

Matt Werner <kb0kqa@delphi.com> writes:

> Phlatline <bd27015@PROBLEM_WITH_INEWS_GATEWAY_FILE> writes:
>
> >I am wondering: there is an internet <-> packet gateway for mailing, why ha
> >there not been any steps taken to rig a direct "pipe" onto the net from pack
>
> I don't know for sure, but I had always thought that it was because there wou
> be no certain way to keep non-HAMs out... It would end up to be a pain for t
> Sysop to do such a thing for all of the HAMs on the internet that would want
> access...
>
> 73 - Matt

I'm sure that it is being done in some places :)

        You may reply to: ve6hf@ve6hf.ampr.ab.ca

Second sources for the 8530 Serial Comms Controller (SCC): AMD and SGS
Thomson.

The NMOS 8530 is the least expensive, a mail order place in VK sent me
one for app. $30 US, you should be able to get them for much less in
the States. The CMOS versions are at least twice that. You could also
consider the 85230 ESCC which has a deeper RX FIFO, is more forgiving
of timing problems, and has less funnies and teething problems.

Zilog Support Products offer an 85230 evaluation kit with examples of
source code, header files etc, a simple PC bus card and the User Manual.

The sheets in Zilogs volume 1 uProcessors and Peripherals are good as
a reference only and are very condensed; to successfully program the
SCC you'll need the SCC User Manual, in particular HDLC...

I have had no problems dealing with Zilog in the US, they promptly
referred me to the local agent :-) At work, I use 85C30's in ASY mode
in a serial link at 128 kbps of speed through a 600 m long tow cable.
Have no experience with HDLC/SDLC modes. Hope this helps, good luck.

Wilbert, ZL2BSJ.

--
Wilbert Knol, Acoustics Group, MAF Marine Research, Wellington, New Zealand.
Usenet: wk@frc.maf.govt.nz   PACKET:ZL2BSJ@ZL2WA.NZL.OC
AMPR:[44.147.180.88] AX25 NET/ROM TCP/IP MBX 146.625 147.075 MHz 24 hrs.

Milton D. Miller II <miltonm@bga.com> writes:

>The watchdog timer works by detecting that the timer process is blocked
>when the hardware timer interrupt ticks. If timer interrupts are blocked
>(usually because all interrupts are off), then the watchdog code doesn't
>run.

I'm not too "up" on interrupts, so forgive me if this sounds a little off...
Is there a way that this can be fixed, without rewriting any of NOS? Whatever
it takes to get it going is pretty much worth it I think...

>If you load dos high then you will get some extra memory. What is going
>on when it locks up? Does your caps lock key work? Can you type more
>than 16 charactesrs without getting beeps? Can you use the 3 finger
>salute or do you have to press the hardware reset button?

Sometimes the 3 finger salute works, other times it doesn't. I haven't loaded
DOS high yet because I'm not ready to tackle a new set of variables... I will
start paying more attention to it when it locks up...

>One thing you can try is reducing features. Compile out code you don't
>need, don't start more sessions at the same time than you need, keep
>an eye on sockets where the other end died, etc. Consider doing a
>software exit/restart or reboot every x hours as a preventitive measure.

I've thought about rebooting every x hours, but locally, TCP activity (FTP, etc)
is active (for the most part) 24 hours... To reboot would most likely knock
someone off, so I'm leaving that as a last resort...

I can't recompile the code (not into C - yet). I've had the system running
for up to 10 days (when I forced it to reboot), while other times it makes
it about a day or so. It usually goes for quite a few days, and when it locks,
it still has lots of memory left (40-50k, which is about what it runs at
anyway)...

>

Any other suggestions anyone? I'm willing to try just about anything, and
please make the answers as descriptive as you want...

73 and thanks to all!

- Matt

kb0kqa@delphi.com

Date: 14 Sep 1994 00:46:46 -0400
From: ihnp4.ucsd.edu!newshub.sdsu.edu!nic-nac.CSU.net!usc!cs.utexas.edu!utnut!
torn!news.unb.ca!upei.ca!peinet.pe.ca!peinet.pe.ca!not-for-mail@network.ucsd.edu
Subject: mfj 1270c/1274c modifications for the net software
To: ham-digital@ucsd.edu

hi,
    here are a bunch of mods to use the mfj 1270c/1274c with htenet
(tn2.08b in particular).

these were developed setting up 32 tnc's for a packet network in
atlantic canada.

to use this tnc with the net software it is necessary to make several
modifications to the pc board as well as the removal of several chips.

1.   remove the circuit board from the chassis
                2 front and 4 side cover screws
                4 screws holding the pc board to the chassis
                1 screw holding regulator to chassis
2.   remove u23 eprom
3.   remove u24 sram (option may not be installed)
4.   remove u40
5.   cut jmp x
6.   remove jmp 9
7.   depending on your node wiring you may have to install
        r14 and r15 100 ohm
8.   on u40 connect pin 16 to pin 1
9.   install new eprom in u23 socket
                for a 27x512 remove jmp 15 then connect jmp 15-2
                to ground

                for a 27x256 strap jmp 15 1-2
10.   reinstall the pc board in the chassis
11.   connect a terminal to the serial port of the tnc
12.   apply power
13.   reset the tnc to force it to load the new bbram values
14.   the tnc should display a sign on message.
15.   try to connect to the tnc (via serial port) to verify operation
16.   put modification record label on inside of cover and reinstall it

good luck

kenny
kenny adams
kadams@peinet.pe.ca
standard disclaimers apply...

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kenny adams   charlottetown prince edward island canada
kadams@peinet.pe.ca
standard disclaimers apply....

Date: 14 Sep 94 18:20:49 GMT
From: news-mail-gateway@ucsd.edu
Subject: mocom 35 on packet
To: ham-digital@ucsd.edu

We use a UHF Mocom 35 on packet here for the 9600 baud port on
UUGATE (The Univ. of Utah gateway).

It took some significan hacking of the IF to make it work well, but it
now works extremely well. The IF bandwidth is a bit broad (18 KHz) but
that makes it extremely forgiving on the receive signal. The skirts on
the receive side aren't particularly sharp, either, but since we don't
have any adjacent channels to be concerned with, that isn't a problem, either...

As it was originally, it was completely unuseable for 9600 baud packet owing
to narrow bandwidth (approx. 11 KHz) and tremendous ripple in the
1st IF passband (about 10db worth of ripple...)

<Clint>

ka7oei@uugate.wa7slg.ampr.org

Date: Wed, 14 Sep 94 08:19:21 EDT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!swiss.ans.net!
solaris.cc.vt.edu!news.duke.edu!eff!news.kei.com!world!mv!lmr!
rapp@network.ucsd.edu
Subject: VHF packet "talk" range
To: ham-digital@ucsd.edu

barrusc@yvax.byu.edu writes:

```
>
>    Can anyone tell me if it is possible to "talk" via packet VHF over long
> distances by linking digipeaters?  What is the longest distance?
>
>    I am looking to getting into packet and was just curious.  73's
>
> Craig
```

Yes, it is, but the practise isn't recommended. It is much more efficient to
connect to nodes and do it that way. For example you connect to node 1, then
connect node 1 to node 2, etc. then node n to whoever you want to connect
with. The reason is this: when you digipeat, each acknowledgement packet goes
backwards through the chain. Each missed packet has to be repeated through
the chain. This means a ton of traffic generated and likely timeouts when you
go through very many during busy periods. Using nodes means that
acknowledgement packets are limited to each node pair, a big savings.

Larry W1HJF

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Hi netters,

We have just recently set up a NOS gateway for the Western Cape region of
South Africa (Cape Town.) zs1uct.ampr.org <--> hamgate.ee.uct.ac.za. We are
presently running NOSview. Any other suggestions for what version of NOS to
use. JNOS, WNOS, TNOS etc.

Many thanx

Rob

(University of Cape Town Amateur Radio Group)

******** Dr. Robin M. Braun ZR1RMB ***********
* Department of Electrical Engineering   *
* University of Cape Town   *

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* Private Bag, Rondebosch, 7700, South Africa  *
* Phone : + 27 + 21 + 650-2810                  *
* Fax   : + 27 + 21 + 650-3465                  *
* Internet : rmbraun@eleceng.uct.ac.za          *
************************************************
```

Date: Wed, 14 Sep 1994 14:56:56
From: ihnp4.ucsd.edu!munnari.oz.au!quagga.ru.ac.za!ucthpx!ee422.ee.ctech.ac.za!
jakes@network.ucsd.edu
Subject: What NOS to use
To: ham-digital@ucsd.edu

In article <rmbraun.294.0009A606@eleceng.uct.ac.za> rmbraun@eleceng.uct.ac.za
(Robin M. Braun) writes:
>From: rmbraun@eleceng.uct.ac.za (Robin M. Braun)
>Subject: What NOS to use
>Date: Tue, 13 Sep 1994 09:38:50
>Summary: What version of NOS should we use
>Keywords: NOS

>Hi netters,

>We have just recently set up a NOS gateway for the Western Cape region of
>South Africa (Cape Town.) zs1uct.ampr.org <--> hamgate.ee.uct.ac.za. We are
>presently running NOSview. Any other suggestions for what version of NOS to
>use. JNOS, WNOS, TNOS etc.

>Many thanx

>Rob

>(University of Cape Town Amateur Radio Group)

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>* University of Cape Town   *
>* Private Bag, Rondebosch, 7700, South Africa *
>* Phone : + 27 + 21 + 650-2810   *
>* Fax   : + 27 + 21 + 650-3465   *
>* Internet : rmbraun@eleceng.uct.ac.za   *
>***

Hi

It all depends on what services you want or want to provide. Therefor, I
guess, it is best to get the source code of any of the latest NOS versions and
compile your own flavour. We here at the Cape Technikon are currently running
a packet <> Internet gateway on KA9Q NOS version 930507 compiled for 386/486
CPU. Or you could can have a look at nos11c-a.exe, it has gopher and www
services.

Rgrds
Jakes

J. du Toit
Electrical Engineering
Cape Technikon
Cape Town
South Africa
Email: jakes@maxwell.ctech.ac.za

Date: 15 Sep 94 13:53:49 GMT
From: news-mail-gateway@ucsd.edu
Subject: WNOS memory leak
To: ham-digital@ucsd.edu

I sufferd 3 long years of this bug.
I fixed it for shure in wnos-940615
its on ftp.ucsd.edu....incoming
Ok.
its also got dama mode..
sorry src code only you need compile it with BC++ 2.00
Barry
at a push ill make a binary at the weekend and upload it.

End of Ham-Digital Digest V94 #307
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